

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 2 290 BROADWAY NEW YORK, NY 10007-1866

MAY 2 2 2014

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Article Number: 7005 3110 0000 5966 1314

Paul Aronsohn, Mayor Village of Ridgewood 131 N. Maple Ave Ridgewood, New Jersey 07450

Re:

In the Matter of: Ridgewood Water

PWS ID: NJ0251001, Docket No. SDWA-02-2014-8017

Dear Mayor Aronsohn:

Enclosed you will find an Administrative Order ("AO"). Among other things, the AO finds that Ridgewood Water is a public water supplier as defined by the Safe Drinking Water Act ("SDWA") and 40 C.F.R. §141.2, and is, therefore, subject to its requirements. The Environmental Protection Agency ("EPA") also finds that Ridgewood Water failed to comply with the SDWA and New Jersey regulation N.J.A.C. 7:10. The enclosed AO requires Ridgewood Water to comply with these requirements.

I urge your cooperation in assuring the requirements of the enclosed AO are met. The violation of an AO may subject the violator to an administratively assessed civil penalty not to exceed \$37,500 per day of violation.

Please note that a second Administrative Order will be issued to Ridgewood Water, to place the system on an enforceable schedule for the evaluation and determination of ground water sources under the direct influence of surface water.

If you have any questions regarding this matter, please contact Nicole Foley Kraft, Chief, Groundwater Compliance Section at (212) 637-3093.

Sincerely,

Dore LaPosta, Director

Division of Enforcement and Compliance Assistance

cc: Frank Moritz, Ridgewood Water

Marcedius Jameson, NJDEP

Richard Paull, NJDEP Karen Fell, NJDEP

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION II 290 BROADWAY NEW YORK NY 10007-1866

Ridgewood Water 131 N. Maple Ave. Ridgewood, NJ 07450

PWS ID: NJ0251001

Respondent

ADMINISTRATIVE ORDER
Docket No.
SDWA-02-2014-8017

I. <u>STATUTORY AUTHORITY</u>

The following findings are made and Order issued under the authority vested in the Administrator of the United States Environmental Protection Agency ("EPA") by Section 1414(g) of the Safe Drinking Water Act ("SDWA" or "the Act"), 42 U.S.C. Section 300g-3(g), and duly delegated to the Director of the Division of Enforcement and Compliance Assistance of Region 2.

II. FINDINGS

- 1. The Village of Ridgewood (hereinafter "Respondent") owns and/or operates the Ridgewood Water "public water system", within the meaning of Section 1401(4) of the SDWA, 42 U.S.C. §300f(4), and 40 C.F.R. §141.2, located in Ridgewood, NJ.
- 2. Respondent is a "supplier of water" within the meaning of Section 1401(5) of the SDWA, 42 U.S.C. §300f(5), and 40 C.F.R. §141.2.
- 3. Respondent is a "person" within the meaning of Section 1401(12) of the SDWA, 42 U.S.C. §300f(12) and is subject to an Administrative Order ("AO") issued under Section 1414(g)(1) of the SDWA, 42 U.S.C. §300g-3(1).
- 4. Respondent's public water system ("PWS") provides water for human consumption. Respondent's PWS regularly serves at least 15 service connections used by year-round residents and/or serves a population of at least 25 individuals, and is therefore a "community water system" ("CWS"), as defined in Section 1401(15) of the SDWA, 42 U.S.C. §300f(15). Respondent is therefore, subject to the requirements of Part B of the SDWA, 42 U.S.C. §300g et seq., and its implementing regulations found at 40 C.F.R. Part 141.

- 5. Respondent's PWS serves a population of 61,700 individuals and its primary source is groundwater supplied by 50 wells. In addition, Respondent purchases surface water from United Water New Jersey Franklin Lakes PWS (NJ0220001) annually from March through December and groundwater from Hawthorne PWS (NJ1604001) from June through September. Surface and groundwater are mixed in the distribution system after treatment. Respondent is therefore, subject to the requirements for surface water sources ("Subpart H systems").
- 6. The New Jersey Department of Environmental Protection ("NJDEP" or "State") administers the Public Water Supply Supervision Program in New Jersey pursuant to Section 1413 of the SDWA. The approval of primary enforcement responsibility from EPA to NJDEP was effective as of July 13, 1979. NJDEP is the primacy agency, as that term is defined in 40 C.F.R. §142.2. However, on February 1, 2013, NJDEP referred the Ridgewood Water PWS to EPA for further investigation and appropriate action as part of the EPA-NJDEP Inspection Workplan.
- 7. Pursuant to Section 1414(i)(4) of the SDWA, 42 U.S.C. §300g-3(i)(4), the implementing regulations for New Jersey's Safe Drinking Water Program (N.J.A.C. 7:10) are applicable requirements of the SDWA.

Total Coliforms

- 8. Pursuant to 40 C.F.R. §141.21(a), PWSs must collect total coliform samples at sites which are representative of water throughout the distribution system according to a written sample siting plan. Samples must be collected at regular time intervals throughout the month, in accordance with 40 C.F.R. §141.21(a)(4).
- 9. Pursuant to 40 C.F.R. §141.21(a), the monitoring frequency for total coliforms for community water systems is based on the population served and indicated in 40 C.F.R. §141.21(a)(2). Based on the population served, Respondent is required to collect a minimum of 70 routine total coliform samples per month.
- 10. Pursuant to 40 C.F.R. §141.21(g)(2), a PWS which has failed to comply with a coliform monitoring requirement, must report the monitoring violation to the State within ten days after the system discovers the violation.

Residual Disinfectant Concentration in the Distribution System

- 11. Pursuant to 40 C.F.R. §§141.74(c)(3)(1) and 141.132(c)(3)(1), the residual disinfectant concentration shall be measured in the distribution system at the same point and at the same time as total coliforms are sampled.
- 12. Pursuant to 40 C.F.R. §§141.74(a)(2) and 141.131(c)(1), PWSs must measure residual disinfectant concentrations with one of the analytical methods indicated in the aforementioned sections or one of the alternative methods listed in 40 C.F.R. Part 141 Subpart C Appendix A.

Non-Productive/Abandoned Wells

13. Pursuant to N.J.A.C. 7:10-11.7(j), any well with unsuitable water quality that cannot be treated to meet the drinking water standards, any nonproductive well or any abandoned well shall be properly sealed.

Operation and Maintenance Requirements

- 14. Pursuant to N.J.A.C. 7:10A-1.12(a)(1)(iv), all licensed operators shall have readily available written detailed operations and maintenance (O & M) procedures that shall include a schedule of routine inspections and preventive maintenance.
- 15. Pursuant to N.J.A.C. 7:10A-1.12(a)(3)(ii), each licensed operator is responsible for maintaining records (log books or computer databases) of the results of inspections of mechanical equipment and appurtenances. Records must include, among other things, the time, date and subject of all system inspections and a report of all breaks, breakdowns, problems, pump failures, emergencies, complaints and/or intervening factors.
- 16. Pursuant to N.J.A.C. 7:10-11.6(c), every treatment plant should be equipped, at a minimum, with analytical equipment for the determination of chlorine residual concentrations. In addition, pursuant to paragraph 20 of the Administrative Consent Order, Docket No. EWR 07683-2004N (enclosed), issued by NJDEP on August 23, 2007, Respondent agreed to complete the installation of a Supervisory Control and Data Acquisition ("SCADA") program to monitor the chlorine residual concentration equipment at each entry point of entry.
- 17. Pursuant to N.J.A.C. 7:10-11.6(b), each water supply source shall be equipped with a totalizing flow meter. For water systems for which the total average flow exceeds 0.1 MGD, flow recording equipment shall be installed for all wells and pump stations.
- 18. Pursuant to N.J.A.C. 7:10-11.16(e), chlorination treatment systems shall be designed to produce the chlorine residual specified in N.J.A.C. 7:10-11.16(e)(3) at specified pH values.

Source, Treatment, Storage and Distribution System Components

- 19. Pursuant to N.J.A.C. 7:10-11.7(g), auxiliary well piping and equipment shall comply, among other things, with the following:
 - a. A well blow off shall be located after the check valve. The blow off shall terminate above ground, and shall be protected against contamination (N.J.A.C. 7:10-11.7(g)2);
 - b. An air relief valve shall be located between the check valve and the well pump (N.J.A.C. 7:10-11.7(g)4); and
 - c. Each well shall be equipped with a water level indicator, discharge pressure gauge, raw water sampling tap, totalizing flow meter, well casing vent, and

protected access to the well to permit the direct measurement of the water level (N.J.A.C. 7:10-11.7(g)5).

- 20. Pursuant to N.J.A.C. 7:10-11:11(c)5, the vents at distribution storage roofs and covers shall be equipped with a down facing elbow or mushroom cover and an insect screen.
- 21. Pursuant to N.J.A.C. 7:10-11.6(i)1, auxiliary power shall be provided for a water supply source and/or treatment facility when such facility is a primary component of a water system and is indispensable to the effective operation of the water system.
- 22. Pursuant to N.J.A.C. 7:10-11:9(d)2, sufficient pumping units shall be supplied so as to have a firm capacity to achieve the maximum design output of the station.

Stage 2 Disinfectants and Disinfection Byproducts Rule

23. Pursuant to 141.621(a)(2), Subpart H systems serving a population of 50,000 – 249,999 must collect eight (8) samples per quarter for total trihalomethanes (TTHMs) and haloacetic acids (HAA5).

Public Notification

24. Pursuant to 40 C.F.R. §141.201(a) and (b), each operator or owner of a PWS must give notice for all violations of national primary drinking water regulations, including violations to the maximum contaminant level (MCL), treatment techniques (TT), monitoring requirements and testing procedures. Public notice requirements are divided in three tiers, to take into account the seriousness of the violation or situation and of any potential adverse health effect that may be involved.

Determination of Ground Water Sources under Direct Influence of Surface Water

25. Pursuant to N.J.A.C. 7:10-9.3(a), each ground water source meeting the criteria established, is required to determine if the source is directly influence by surface water, in accordance with N.J.A.C. 7:10-9.4.

Findings of Violations

- 26. Beginning on March 11, 2014 and ending on April 3, 2014, EPA and NJDEP conducted a sanitary survey at Respondent's PWS. Pursuant to 40 C.F.R. §141.723, a sanitary survey is an onsite review of the water source, facilities, equipment, operation, maintenance, and monitoring compliance of a PWS to evaluate the adequacy of the PWS, its source and operations, and the distribution of safe drinking water. Based on the evaluation of records for the period of January 2011 through March 2014 and an inspection of the Ridgewood Water PWS, it was observed that:
 - a. Respondent failed to have a total coliform monitoring siting plan available for review, in violation of 40 C.F.R. §141.21(a). In addition, total coliform samples are not being collected at regular intervals throughout the month. No

- documentation was observed proving that Public Notice was conducted, as established in 40 C.F.R. Part 141 Subpart Q.
- Respondent failed to meet the minimum number of total coliform compliance samples (70) for the month of February 2013, in violation of 40 C.F.R. §141.21(a)(2). No documentation was observed to demonstrate that a Public Notice was conducted, as established in 40 C.F.R. Part 141 Subpart Q.
- c. Respondent failed to notify the State of their failure to comply with a total coliform monitoring requirement within ten days of the discovery of the violation, in violation of 40 C.F.R. §141.21(g).
- d. Respondent failed to measure the residual chlorine concentration at least at the same points in the distribution system and at the same time as total coliforms are sampled on the following dates: March 21, 2011, April 4, 2011, April 7, 2011, May 4, 2011, June 24, 2011, July 29, 2011, August 31, 2012 and June 12, 2013, in violation of 40 C.F.R. §§141.74(c)(3)(1) and 141.132(c)(1). No documentation was observed to demonstrate that a Public Notice was conducted, as established in 40 C.F.R. Part 141 Subpart Q.
- e. Respondent's Standard Operating Procedure (SOP) for the measurement of chlorine residual concentration in the distribution system utilizes the incorrect amount of indicator (DPD Free and Total Chlorine Powder Pillows) and therefore, the procedure deviates from the approved methods, in violation of §§141.74(a)(2) and 141.131(c)(1). No documentation was observed to demonstrate that a Public Notice was conducted, as established in 40 C.F.R. Part 141 Subpart Q.
- f. Respondent failed to seal historic nonproductive/abandoned wells, in violation of N.J.A.C. 7:10-11.7(j).
- g. Respondent failed to develop a schedule of routine inspections and preventative maintenance as part of the written Operation & Maintenance Procedures, in violation of N.J.A.C. 7:10A-1.12(a)(1)(iv).
- h. Respondent failed to maintain records (log books or computer databases) of the results of inspections at all mechanical equipment and appurtenances, including the time, date and subject of the inspection, and a report of all breaks, breakdowns, problems, pump failures, emergencies, complaints and/or intervening factors, in violation of N.J.A.C. 7:10A-1.12(a)(3)(ii).
- i. Respondent failed to report accurate chlorine residual data for each treatment plant, in violation of N.J.A.C. 7:10-11.6(c) and paragraph 20 of Administrative Consent Order, Docket Number EWR 07683-2004N. Communication problems between SCADA components and the failure to implement a calibration program for the analytical meters are factors contributing to the problem.
- j. Respondent failed to accurately monitor and record flow (total/instantaneous) for each of its wells/treatment plants/pump stations, due to problems to the SCADA system and a lack of a calibration program, in violation of N.J.A.C. 7:10-11.6(b)1.
- k. Respondent's compliance with disinfection contact time requirements cannot be determined due to the inaccuracy of the pH and chlorine residual concentration data. Respondent is therefore, in violation of N.J.A.C. 7:10-11.16(e).
- 1. Respondent failed to:
 - i. Equip pumps with an air relief valve located between the check valve and the well pump, in violation of N.J.A.C. 7:10-11.7(g)4.

- ii. Equip each well with a well casing vent, in violation of N.J.A.C. 7:10-11.7(g)5.
- iii. Screen and protect well blow offs against contamination, in violation of N.J.A.C. 7:10-11.7(g)2.
- iv. Install protective screening at storage tank overflows, in violation of N.J.A.C. 7:10-11:11(c)5.
- v. Provide auxiliary power (quick connect or emergency generators) at treatment plants and pump stations that are primary components of the water system, in violation of N.J.A.C. 7:10-11.6(i)1.
- vi. Have operable sufficient pumping units so as to have a firm capacity to achieve the maximum design output of the pump station, in violation of N.J.A.C. 7:10-11.9(d)(2).
- m. Respondent failed to collect eight (8) samples per quarter for total trihalomethanes (TTHMs) and haloacetic acids (HAA5), in violation of 40 C.F.R. §141.621.
- n. Respondent's sources are in close proximity to a surface water source, have well casings that are less than 50 feet in depth and/or have operational raw water data that detects the presence of E. coli; triggering the requirements of N.J.A.C. 7:10-9.3 for the evaluation and determination of groundwater under the direct influence of surface water (GWUDI) sources. No documentation was provided to demonstrate that Ridgewood Water completed a GWUDI determination. Respondent is therefore, in violation of N.J.A.C. 7:10-9.3 and 9.4.

Significant Deficiencies

- 27. Pursuant to 40 C.F.R. §141.723, a significant deficiency includes a defect in design, operation, maintenance, or a failure or malfunction of the sources, treatment, storage, or distribution system that EPA determines to be causing, or has the potential for causing the introduction of contamination into the water delivered to consumers.
- 28. Based on the file review and inspection conducted at Respondent's system, the following significant deficiencies were identified:
 - a. Failure to correct significant deficiencies that were identified during the 2009 inspection of the following storage tanks: Ames, Aqueduct 1 & 2 and the Glen Avenue.
 - b. Failure to provide copies of recent inspection reports for the Cedar Hill, Eastside, Lafayette, Southside, Vance and Valley View storage tanks.
 - c. Significant deficiencies were identified at system components during the field inspection:
 - i. Chemical pumps resting on top of chemical storage containers.
 - ii. Failure to provide secondary containment for the chemicals to safeguard against accidental spills.

- iii. Discoloration and/or sediments in the chlorine and pH analyzer equipment.
- iv. Deposits/buildup on the raw and treated water sample taps.
- v. Excessive oil lubrication/oil leak at some well components.
- vi. In accordance with N.J.A.C. 7:10-11.6(g)(4), each building must have adequate heat, lighting, ventilation and if needed dehumidification. Each treatment plant must be evaluated to determine if humidifiers are to be repaired or added.
- 29. By letter dated May 20, 2014, EPA notified Respondent of the above referenced significant deficiencies. Respondent has forty-five (45) days from receipt of letter to provide a corrective action plan.
- 30. EPA is issuing this Administrative Order to place Respondent on an enforceable schedule to comply with the requirements of the SDWA and NJDEP applicable regulations.

III. Order

Based on the foregoing FINDINGS, and pursuant to the authority of Section 1414(g) of the SDWA, EPA hereby ORDERS:

- 31. Within fifteen (15) days of receipt of this AO, Respondent must correct/replace the method used for the determination of the chlorine residual concentration within the distribution system. Within in thirty (30) days of receipt of this AO, a copy of the new/modified Standard Operating Procedure (SOP), including the method used and the type of chlorine measured (free or total), shall be submitted to EPA and NJDEP.
- 32. Within thirty (30) days of receipt of this AO, Respondent must submit a Total Coliform monitoring plan to EPA and NJDEP for evaluation and approval.
- 33. Within forty-five (45) days of receipt of this AO, Respondent must submit information regarding ground water under the direct influence of surface water conducted at Respondent' system. Information shall include, but is not limited to water quality data and microscopic particulate analysis conducted at Respondent's wells.
- 34. Within forty-five (45) days of receipt of this AO, Respondent must submit to EPA and NJDEP, for evaluation and approval, an action plan for the correction of violations identified in paragraph 26 f-m above. The action plan must detail the steps that Respondent will take to return to compliance, including milestones and completion dates.
- 35. Within forty-five (45) days of receipt of this AO, Respondent must notify the public of the failure to comply with drinking water standards, as indicated in paragraph 26 a, b, d and e. A copy of the public notice and certification that it was completed must be submitted to EPA and NJDEP within ten (10) days of its completion.

- 36. Within sixty (60) days of receipt of this AO, Respondent must implement a program for the calibration of analytical meters (i.e. chlorine residual, pH and flow meters). If Respondent elects to calibrate its analytical equipment in-house, Response must contact the services of a third party to calibrate the equipment on an annual basis. Records of calibration, including dates and name of person/company that performed the calibrations, must be kept and be available for review by EPA and NJDEP.
- 37. Within sixty (60) days of receipt of this AO, Respondent must submit to EPA and NJDEP, a modified monitoring plan including an additional 2 locations for TTHMs and HAA5, in accordance with 40 C.F.R. §§141.621 and 141.622(c).
- 38. Respondent must provide quarterly progress reports to USEPA and NJDEP describing the corrective actions taken during the previous quarter to address the violations identified in Paragraph 26. Upon the effective date of this ORDER, reports shall be submitted quarterly by July 15th, October 15th, January 15th and April 15th until full compliance with this Order is achieved. Each quarterly progress report must include (for USEPA) a copy of the Total Coliform data, chlorine residual concentration within the distribution system and copies of any bacteriological raw water monitoring conducted at Respondents' raw water sources beginning on April 1, 2014.
- 39. All information required to be submitted by this Order to EPA and NJDEP shall be mailed to:

Nicole Foley Kraft, Chief Groundwater Compliance Section U.S. Environmental Protection Agency 290 Broadway, 20th Floor New York, NY 10007-1866 (212) 637-3093

and

Richard Paull, Manager
Bureau of Water Compliance and Enforcement-Northern
New Jersey Department of Environmental Protection
7 Ridgedale Avenue
Cedar Knolls, NJ 07927

IV. GENERAL PROVISIONS

40. Notwithstanding Respondent's compliance with any requirement of this Order, Respondent's failure to comply with all of the requirements of the Act and Part 141 may subject Respondent to additional enforcement action, including but not limited to judicial, administrative and equitable actions.

- 41. This Administrative Order shall not prohibit, prevent, or otherwise preclude EPA from taking whatever action it deems appropriate to enforce the Act in any manner and shall not prohibit, prevent, or otherwise preclude EPA from using this Order in subsequent administrative or judicial proceedings. Nothing in this Order shall constitute a waiver, suspension or modification of the requirements of the Act, or the rules and regulations promulgated thereunder which remain in full force and effect. Issuance of this Order is not an election by EPA to forgo any civil or criminal action otherwise authorized under the Law.
- 42. The Respondent may be subject to an administrative civil penalty of up to \$32,500 pursuant to Section 1414(g)(3)(B) of the Act, 42 U.S.C. §300g-3(g)(B) or a civil penalty assessed by an appropriate United States District Court that exceeds \$32,500 pursuant to Section 1414(g)(3)(C) of the Act, 42 U.S.C. §300g-3(g)(3)(C). A violation of any term of this Order may also subject the Respondent to a judicial civil penalty of up to \$37,500 per day per violation pursuant to Section 1414(b) of the Act, 42 U.S.C. §300g-3(b).
- 43. Respondent may seek federal judicial review of the Order pursuant to Section 1448(a) of the Act, 42 U.S.C. §300j-7(a).
- 44. This Order does not relieve Respondent of any responsibilities or liabilities established pursuant to any applicable federal, State or local law.
- 45. This Administrative Order shall take effect upon the signature of the Director, Division of Enforcement and Compliance Assistance.

ORDERED, this 22nd day of May, 2014

Dore LaPosta, Director

Division of Enforcement and Compliance Assistance